

## GILA RIVER BASIN

### 09504500 OAK CREEK NEAR CORNVILLE, AZ

**LOCATION**--Lat 34°45'52", long 111°53'25", in NW<sub>1/4</sub>SW<sub>1/4</sub> sec. 23, T.16 N., R.4 E., Yavapai County, Hydrologic Unit 15060202, on right bank 250 ft downstream from county highway bridge, 0.2 mi upstream from Page Springs, 4 mi northeast of Cornville, and 15 mi upstream from mouth.

**DRAINAGE AREA**--355 mi<sup>2</sup>.

**PERIOD OF RECORD**--July 1940 to Sept. 1945, Apr. 1948 to current year.

**REVISED RECORDS**--WSP 1149: 1948(M). WRD Ariz. 1974: 1973. WDR AZ-89-1: Drainage area. WDR AZ-98-1: 1997.

**GAGE**--Water-stage recorder and crest-stage gage. Elevation of gage is 3,470 ft above sea level, from topographic map. Prior to Mar. 10, 1981, at site 250 ft upstream at same datum.

**REMARKS**--Records fair except for estimated daily discharges, which are poor. Numerous diversions above and below station for irrigation.

**EXTREMES FOR PERIOD OF RECORD**--Maximum discharge, 26,400 ft<sup>3</sup>/s Feb. 19, 1980, gage height, 16.30 ft; maximum gage height, 19.15 ft, Feb. 20, 1993; minimum discharge, 6 ft<sup>3</sup>/s July 27, 1940.

**EXTREMES OUTSIDE PERIOD OF RECORD**--Maximum stage since at least 1885, 23 ft in Mar. 1938, from floodmarks (upstream side of bridge).

**EXTREMES FOR CURRENT YEAR**--Peak discharges greater than base discharge of 1,300 ft<sup>3</sup>/s and (or) maximum (\*):

	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
	July 14.....	2145	1,600	5.53
	Aug. 18.....	1830	*4,040	*8.39

Minimum daily discharge, 16 ft<sup>3</sup>/s on July 12-13.

#### DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	32	38	41	38	118	43	34	24	18	20	21
2	24	34	35	44	37	86	47	34	23	19	20	22
3	25	38	34	43	38	71	57	33	22	20	20	22
4	26	35	33	43	41	131	45	30	21	18	20	22
5	25	33	35	41	41	166	43	24	19	18	21	22
6	25	33	39	38	43	216	48	24	18	17	25	22
7	25	34	39	39	42	262	51	24	18	18	142	22
8	25	34	39	39	44	416	49	24	19	20	30	23
9	25	38	40	38	39	525	47	24	18	20	24	23
10	26	39	36	38	36	611	45	24	19	21	22	23
11	50	40	36	36	441	46	24	20	17	22	23	
12	27	46	37	35	37	388	47	26	21	16	24	23
13	26	148	38	35	37	560	41	26	21	16	27	23
14	26	64	39	35	39	309	34	26	22	141	22	22
15	26	41	40	35	40	196	36	27	24	145	25	23
16	28	38	42	33	40	137	33	26	24	41	27	22
17	30	36	41	33	38	105	33	25	24	33	22	22
18	30	34	41	34	39	86	32	25	23	24	508	23
19	29	33	43	33	43	74	33	26	21	24	120	43
20	34	32	44	35	48	64	35	31	20	23	36	68
21	28	33	44	38	49	58	32	26	19	22	32	e32
22	28	31	42	37	49	51	32	26	20	24	36	e28
23	26	33	40	35	57	47	31	24	17	19	31	e25
24	25	36	41	35	61	46	31	26	17	20	22	24
25	26	35	42	35	62	45	32	33	20	20	22	23
26	26	34	49	38	72	41	30	32	20	19	23	23
27	27	35	63	35	89	40	33	22	20	20	21	23
28	29	36	57	34	308	40	29	21	21	20	21	23
29	29	36	48	34	150	43	28	23	19	20	23	25
30	29	36	47	35	--	40	30	23	19	20	23	27
31	30	--	43	37	--	39	--	26	--	20	21	--
TOTAL	858	1207	1285	1141	1693	5452	1153	819	613	893	1452	767
MEAN	27.7	40.2	41.5	36.8	58.4	176	38.4	26.4	20.4	28.8	46.8	25.6
MAX	50	148	63	44	308	611	57	34	24	145	508	68
MIN	23	31	33	33	36	39	28	21	17	16	20	21
MED	26	35	40	35	41	86	34	26	20	20	23	23
AC-FT	1700	2390	2550	2260	3360	10810	2290	1620	1220	1770	2880	1520
CFSM	0.08	0.11	0.12	0.10	0.16	0.50	0.11	0.07	0.06	0.08	0.13	0.07

#### STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	60.7	106	96.2	175	242	159	31.7	20.4	23.9	33.3	39.5
MAX	571	450	881	1304	1391	1323	1097	216	58.0	40.8	90.9
(WY)	1973	1966	1967	1993	1980	1978	1973	1957	1950	1951	1970
MIN	20.1	22.7	29.6	32.2	31.2	28.8	25.0	17.1	13.7	14.1	12.9
(WY)	1990	1993	1996	1996	2002	1972	1996	1943	1940	1944	1980

#### SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1940 - 2004

ANNUAL TOTAL	25911		17333								
ANNUAL MEAN	71.0		47.4								
HIGHEST ANNUAL MEAN											
LOWEST ANNUAL MEAN											
HIGHEST DAILY MEAN	1920	Mar 17	611	Mar 10							
LOWEST DAILY MEAN	14	Jul 8	16	Jul 12							
ANNUAL SEVEN-DAY MINIMUM	14	Jul 6	18	Jul 1							
ANNUAL RUNOFF (AC-FT)	51390		34380								
ANNUAL RUNOFF (CFSM)	0.200		0.133								
10 PERCENT EXCEEDS	102		57								
50 PERCENT EXCEEDS	32		33								
90 PERCENT EXCEEDS	17		20								

e Estimated